

ABSTRACT OF THE DISCLOSURE

[0038] A new and improved method for exposing alignment marks on a substrate by locally cutting through a metal or non-metal layer or layers sequentially deposited on the substrate above the alignment marks, using focused ion beam (FIB) technology. In a preferred embodiment, a method for exposing alignment marks on a substrate can be carried out by first providing a substrate that has multiple alignment marks provided thereon and at least one overlying opaque layer, typically but not necessarily metal, deposited on the substrate above the alignment marks. A focused ion beam is then directed against the overlying opaque layer or layers to cut through the layer or layers and expose the alignment marks on the substrate. A noble gas, preferably argon, is typically used as the ion source for the focused ion beam.